CHAPTER 3

REVIEW OF APPLICATION PROCESSES IN VARIOUS JURISDICTIONS

Effective traffic calming programs require a carefully designed process based on explicit guidelines, policies, and procedures that cover the planning, evaluation, implementation, and maintenance of traffic calming devices in residential areas. Although such processes are not the same in all jurisdictions, they usually have similar goals: (1) to help residents and city officials resolve neighborhood traffic problems cooperatively, fairly, and efficiently; and (2) to streamline neighborhood application processes. Below is a description of the District's current process, followed by some examples of procedures used in the application processes for and deployment of traffic calming measures in selected residential neighborhoods.

Current Practice in the District of Columbia

Currently, the District of Columbia does not have a published policy and guidelines for applying traffic calming measures. In order to meet the demand for traffic calming, DDOT has used engineering judgment, on a case-by-case basis, in responding to requests from individuals, groups and ANCs. The application procedure is currently informal. Under its current system, DDOT approves a traffic calming measure for implementation if an ANC endorses the measure with at least sixty five percent (65%) support. A thorough traffic study, which is generally called for before deployment of traffic calming measures, is not usually conducted. Instead, engineering judgment is often relied upon again. Although community involvement is crucial in the decision-making process, public meetings are not well–organized.

Selected Cities

Fairfax, VA

Fairfax, Virginia has a formal process for considering, evaluating and implementing traffic calming measures on its residential streets. Fairfax installs traffic calming measures such as speed humps, chokers, traffic circles, chicanes, and pedestrian refuges. The process is summarized below:

- ***Petition***: The process begins with a petition to the City Manager signed by at least sixty-six percent (66%) of the households with frontage on the block(s) of the street on which the traffic measure is requested. Upon the recommendation of the City Council, a traffic calming study is thereafter initiated.
- ***Traffic Calming Study*****:** (a) The study begins with a public meeting to which all the potentially affected residents are invited. An overview of what traffic calming is, what its goals are and what criteria are used in selecting measures, along with their advantages and disadvantages, are provided. The meeting allows for comment from the residents. (b) Data collected by city staff for analysis and review include traffic volumes and speeds (average weekday for each street), posted speed limits, accident data reports, physical data (street width, number of lanes, alignment, etc), and emergency vehicle and snow emergency routes. (c) A neighborhood task force is

then formed to work alongside city staff to develop a plan for implementing the traffic calming measures.

- ***Traffic Calming Study Priority and Design Criteria*:** The City employs a host of criteria in establishing priorities for installing traffic calming measures, some of which are listed in Chapter 2. Based on the study and these criteria, along with concerns about diverted traffic and safety and an awareness of the formal design standards of the city, a traffic calming measure may or may not be approved by a Transportation Safety Commission (TSC). Prior to a decision being made on an application, the TSC holds a public meeting where residents are provided an opportunity to give their views on the traffic calming study and plan. The TSC then provides its recommendation to the city manager.
- ***Traffic Calming Plan Approval*:** The city manager makes the decision on whether or not to implement or modify the traffic calming measure (or plan) after reviewing the TSC recommendation and the traffic calming plan. He or she also determines funding for installation or construction based on an approved budget or, if necessary, a recommendation can be forwarded to the city council for a supplemental appropriation.
- ***Appeal Process*:** In an instance where an application is not approved, residents may appeal through the city council within twenty eight (28) days of the decision. The appeal should, again, be accompanied by a petition signed by at least 66% of the households facing the block(s) of the street on which the traffic measure is requested.
- ***Project Implementation*:** Traffic calming projects are scheduled after all the necessary decisions involving the appeal process, design, and funding have been made. The scheduling of the implementation of a traffic calming measure is then included in upcoming projects as the work schedule allows.
- ***Project Evaluation, Modification, and Removal*:** An evaluation team reviews the traffic calming project from a safety standpoint within a year of installation. Typically, traffic volumes, speeds and accidents are reviewed. In cases where the review team or the Director of Public Works finds an adverse situation created by the traffic calming measure, the measure is modified or removed. A removal of a measure requires a petition signed by at least 66% of the households with frontage on the block(s) of the street on which the traffic measure is located.

Charlottesville, VA

The Neighborhood Planning and Development Services/Engineering of the Charlottesville, Virginia is responsible for its traffic calming program. The city's application procedures are similar to those used in the Fairfax. The residents, through neighborhood associations, identify areas of concern and provide suggestions for traffic calming measures to address them. Again, at least two thirds (2/3) of neighborhood residents must support each proposal. If a neighborhood association does not exist in the area, an individual may request that the city study the problem by collecting the signatures of at least twenty percent (20%) of the households in the impact area. This requirement ensures that the problem is perceived and experienced by a sizeable number of people in the neighborhood.

Arlington County, VA

In 1991, the Arlington County Board implemented a traffic calming program. Measures available for use in the city include traffic circles, rumble strips, and speed

humps, among others. At least 60% community support is required for a traffic calming measure to be considered for implementation, and some measures require at least 70% support. If the support is there, a thorough traffic calming study is conducted, after which a point-based system is used to prioritize traffic calming projects based on factors such as vehicle speeds and volumes.

Montgomery County, MD

Montgomery County deploys traffic calming measures such as speed humps, roundabouts, raised intersections or crosswalks and median or pedestrian refuge islands, among others. The Division of Traffic and Parking Services (DTPS) in the Department of Public Works and Transportation has a traffic calming application process similar to those outlined above. However, DTPS requires the concurrence of not less than 80% of households whose livability is directly affected by the traffic conditions on the street or street section being considered for a traffic calming measure installation. This typically means direct road frontage on the segment in question but can also include side and rear yard frontages depending on the circumstances. For example, speed humps require the concurrence of not less than 50% of the residents on streets in the neighborhood whose only access to other streets is via the street(s) being considered for speed humps.

Prince George's County, MD

Prince George's County, MD, has a Neighborhood Traffic Management Program (NTMP) which outlines processes for identifying, evaluating, and addressing undesirable traffic conditions related to speeding and excessive volumes. Like other established traffic calming programs, the NTMP encourages and promotes citizen involvement in all aspects. Upon receipt of a request for a traffic calming measure by at least two-thirds (2/3) of a street's residents, the Department of Public Works and Transportation traffic division conducts a traffic study of the street to determine volume, speed, accident, pedestrian safety, and physical street condition information. To ensure the efficient use of county resources, a point scoring system is used. The point scores are based on speed, volume, the presence or absence of sidewalks, traffic accident data, the presence of school crossings and pedestrian generators, transit availability and residential density.

The point assignment system establishes a numerical score for each residential street for which a request for a traffic calming measure has been received, and the score helps determine what actions will be taken.

Delray Beach, FL

In Delray Beach, requests for traffic calming measures come from either, (1) homeowners associations, (2) public safety officials, or (3) other city officials. As in other cities, a traffic calming study is initiated when the city manager receives a petition signed by at least sixty-six percent (66%) of the households or homeowners facing the block(s) of the street for which the traffic calming measure is requested. A traffic calming initiative may also result from a public safety issue identified by city staff.

Delray Beach also uses a point assignment system to determine the eligibility and ranking of traffic calming projects. Point assignments are based on factors similar to those used in Prince George's County, MD.

Chicago, IL

Chicago has installed a number of traffic calming measures including cul de sacs, traffic circles, curb bulbs, and speed humps. The City has published a traffic calming program which contains guidelines and policies to be followed. In implementing its program, the city engages the community in the decision-making process for the approval or rejection of a traffic calming application. The requirement for the support of a request in Chicago is sixty percent (60%) of the households within a defined study area of the anticipated location of the traffic calming measure. The community, in addition, must also produce a written commitment from a recognized local organization to maintain traffic calming devices that contain landscaping. The maintenance may include watering, weeding, picking up trash, and replacing dead plants.

Houston, TX

The Department of Public Works and Engineering in Houston, TX has published a formal policy and guidelines for the installation and removal of speed humps. Although they are for the installation of speed humps, they could also be employed for the installation of other traffic calming measures. Whether requested humps are installed depends on the results of a traffic engineering study done by the department.

San Diego, CA

San Diego developed its Neighborhood Traffic Safety Program in 1991 to address undesirable traffic in residential neighborhoods. Community involvement has been an essential element of the program's success. On average, the city requires at least seventy-five percent (75%) of the fronting residents to support a traffic calming proposal before a study is initiated. San Diego has installed a wide range of measures including speed humps and traffic circles. In addition to installing physical measures, a Neighborhood Traffic Watch program, which involves the use of a trailer-mounted radar unit that displays their speeds to passing motorists (as described in Chapter 2) is also used. Finally, residents volunteer to circulate flyers encouraging drivers to slow down in their neighborhood as well as monitor the speeds of motorists. These volunteers note the date, speed, license number, and make and model of speeding vehicles. They then send this to the Department of Motor Vehicles which then mails letters to vehicle owners encouraging them to reduce speeds and exercise additional caution when traveling on neighborhood streets. The drivers are not cited for speeding.

Tempe, AZ

The continued redevelopment and growth of Tempe led the Transportation Division of the Public Works Department to create a Neighborhood Traffic Management Program in 1996. The program provides goals, policies and guidelines which form the basis of the process citizens use to initiate a traffic calming request.

Request for a traffic study is made to the Neighborhood Program Administrator or to the Public Works Department after a neighborhood consensus is reached. The city requires the support of at least sixty-five (65%) of neighbors indirectly affected – those living in adjacent neighborhoods with no optional routes; 80% of neighbors directly affected – those living in the same neighborhood and 100% of residents with houses adjacent to the problem[14].

The program offers two options for resolving traffic problems. Type 1 includes signing, striping and enforcement while Type 2 involves the use of physical measures

such as speed humps, island diverters and traffic circles among others. Once a need is identified, city staff and residents meet to first consider Type 1 options for installation. If they do not correct the problem(s), Type 2 options are then considered.

Berkeley, CA

The planning division of the Public Works Department in Berkeley, CA has implemented a residential traffic calming program which offers procedures and guidelines similar to those outlined in other cities. As in Prince George's County, Berkeley uses a point system for prioritizing projects after a preliminary investigation is conducted on the street segment where the problem is identified. The ranking also determines which category of possible solutions should be applied. The program has two (2) phases of solutions or planning processes. The Phase I planning process involves low-impact options (deployment of signs, striping, etc.), which are presented at a public meeting. Within one month after agreement is reached with citizens, solutions are implemented. They then remain in place for three to six months, after which traffic engineering staff evaluate their effectiveness.

If the problem persists, Phase II options are considered. Phase II options involve the installation of measures such as speed humps, traffic circles, and other physical approaches. They are considered for top-ranked street segments or when Phase I options have failed to yield desired results.

City of Nepean, Ontario

The Public Works Department in the Canadian city of Nepean, Ontario developed a Neighborhood Traffic Management Policy Guide which also provides procedures and guidelines for the installation of traffic calming measures. The city, like others, requires broad-based community support for traffic calming measures – at least sixty-six percent (66%) of households in a particular study area. However, if community support is lacking, the city may choose to consider traffic calming measures based on traffic safety concerns.

The Role of States

In traffic engineering practices, all states adhere to outlined policies and manuals including the Manual on Uniform Traffic Control Devices (MUTCD) and the Highway Capacity Manual (HCM). In an effort to develop procedures and guidelines for the implementation of traffic calming measures, the departments of transportation in many states supplement these existing policies and procedures. Since management of road networks in many states has been decentralized, the states often leave the details of procedures, guidelines and policies for traffic calming programs to local cities, counties, districts or towns.

Generally, once local jurisdictions develop a traffic calming program, a state's department of transportation ensures that its policies and procedures are consistent with those that already exist.

A Note on the European Experience

Traffic calming has generated increasing interest, not only in the United States and Canada, but also in Europe. There, traffic calming on major and minor neighborhood streets has been in practice for over a decade. During this time, many problems have

been addressed and processes have been institutionalized. Countries which have successfully implemented traffic calming programs include Great Britain, Germany, Denmark and the Netherlands.

SUMMARY

Based on the literature reviewed in preparing this report, it is clear that citizen involvement is crucial for an effective traffic calming program. However, the methods for including citizens in the traffic calming process are quite varied. Some jurisdictions have made an effort to publish their traffic calming programs in print and on Web sites, while others articulate their processes as the need arises. Another critical observation is the variation in the minimum percentage of citizen support necessary needed to advance a traffic calming request to the study stage. A range of 20 – 90 % has been noted in the literature. In addition, although there were efforts to ensure that residents who are most likely to experience beneficial impacts of a measure (those residing on blocks adjacent to the proposed deployment site) are recognized, the literature is not clear on how remote residents (pass-through commuters) should be included. This issue of deciding which households to include as voters on traffic calming initiatives is critical. This is especially so in cities with a grid system of two-directional streets. In these cases, those likely to be affected by a measure need not live adjacent to the proposed site because of the possibility of a measure diverting traffic. The concept of considering residents that use the proposed deployment site as a preferred route has not been found in the general literature. The observed practice of eliminating from consideration for voting those residents with alternate routes assumes that all alternates are of the same value. At a minimum, DDOT officials need to determine the households for inclusion in voting, using other factors other than proximity to a proposed deployment. The decision on inclusion of voting households could also originate from citizens (via ANCs, for example), subject to the approval of the city.

From the examples of traffic calming guidelines in cities outlined above (and others not mentioned hee), it is clear that for an effective implementation of a traffic calming program, guiding principles are needed. These guidelines should empower citizens to involve themselves in a collaborative process to make neighborhoods more livable. The guidelines should include the following elements:

- Application process
- Traffic calming study
- Design of traffic calming measures
- Approval process
- Project implementation
- Project evaluation, modification or removal

Each of these areas should have an outlined procedure that must be followed to ensure a well-organized traffic calming program.